

JURCSAK, Laszlo, Dr.

Bilateral paralysis of the vocal cords after suicidal hanging. Orv.
hetil. 98 no.41:1135-1136 13 Oct 57.

1. A Hajdu-Bihar Megyei Tanacs Korhaza (mb. igazgato-foorvos:
Muranyi Klara dr.) Ful-orr-gege Osztalyanak (foorvos: Jurcsak Laszlo
Dr.) kozlemenye.

(VOCAL CORDS, paralysis
bilateral, after attempted suicide by hanging (Hun))
(SUICIDE

attempted by hanging followed by bilateral paralysis
of vocal cords (Hun))

JURCSAK, Laszlo, Dr.

Latent sarcoma of the nasal septum. Ful orr gegegyogy. 4 no.1:39-40
Mar 58.

1. Hajdu-Bihar Megyei Tanacs Korhaza Ful-orr-egeosztalyanak (Foorvos:
Juresak Laszlo dr.) kozlemenye.

(SARCOMA, RETICULUM CELL, case reports

nasal septum, latent sarcoma (Hun))

(NASAL SEPTUM, neoplasms

sarcoma, reticulum cell, latent, case report (Hun))

JURCSAK, Laszlo, dr.

Postoperative sinus thrombosis following herpes cephalicus.
Fulorrgegegyogyaszat. 8 no.2:87-92 Je '62.

1. A Hajdu-Bihar Megyei Tanacs Korhaza (Debrecen) Ful-orr-gegeosztalyanak
(Foorvos: Jurcsak Laszlo dr.) kozalemenye.
(SINUS THROMBOSIS etiol) (EAR dis) (MENINGES dis)
(BRAIN dis) (HERPES etiol)

JURCSAK, Laszlo, dr.

Postoperative sinus thrombosis following herpes zoster cephalicus.
Fulorrgegegyogyaszat 8 no.4:182-186 D '62.

1. A Hajdu-Bihar Megyei Tanacs Korhaza (Debrecen) Fulorrgegegyogyaszat
(Főorvos: dr. Jurcsak Laszlo) körlemeze.
(SINUS THROMBOSIS) (HERPES ZOSTER) (OTITIS MEDIA)
(MENINGITIS) (CHOLESTEATOMA)

JURCSAK, Laszlo, dr.

Cured case of cavernous sinus thrombosis following banal nasal trauma. Fulorrgégegyogyaszat. 9 no. 2:94-95 Je '63.

1. Hajdu-Bihar Megyei Korhaz (Debrecen) Ful-orr-gegeosztalyanak
(Foovvos: Juroszak Laszlo dr.) kozlemenye.
(SINUS THROMBOSIS) (NOSE) (FACIAL INJURIES)
(ANTIBIOTICS) (MENINGITIS)

JURCSAK, L.; FURKA, I.; BALOGH, Roza

Experimental constriction of the nasal cavity by auto-alloplasty.
Acta chir. acad. sci. Hung. 4 no.3:189-193 '63.

1. Department of Otolaryngology (Head: L. Jurcsak), Hospital
of the County Council, Debrecen; Institute of Surgical
Anatomy and Surgery (Director: Gy. Bornemisza), University
Medical School, Debrecen.

(RHINITIS, ATROPHIC) (RHINOPLASTY)
(ACRYLIC RESINS)

JURCSIK, I.

- Kiss, J. Stereochemical and synthetic studies in the sphingosine field. Pt.
14. The structure of sphingoglycosides. In English. p. 477.
ACTA CHIMICA, Budapest, Vol. 5, no. 3/4, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

JURCSIK, Istvan (Pecs); UPOR, Endre (Pecs); HOHMANN, Jeno(Pecs); JUHASZ,
Sandor (Pecs)

Fixing radioactive elements on mineral coals and the nature of the
uranium-humic acid bond. Kem tud kozl MTA 16 no.1:117 '61.

(Radioactive substances) (Coal) (Uranium)
(Humic acid)

BARABAS, Andor, geologus, a foldtani tudomanyok kandidatusa (Pecs);
JURCSIK, Istvan, vegyeszmernek (Pecs); UPOR, Endre,
vegyeszmernek (Pecs)

Uraniferous ore and coal deposits. Pt. 2. Term tud kozl 7
no.10:464-466 0 '63.

JURCSIK, I.

UFOR, E. (Pecs, Hanjnoczi J.u.25/a); YURCHIK, I. [Juroszik, I.] (Pacs,
Jozsef,u.19); MOKHAI, M. [Mohai, M.] (Pecs, III., 39-es Bandar
ut 4/1)

Experience with analyzing rocks of minute thorium content and
the rapid determination of thorium by means of arsenazo III.
Acta chimica Hung 37 no.1:1-15 '63.

YURCHIK, I. [Jurcsik, Istvan] (Pecs, Jozsef u. 19); UPOR, E. [Upor, Endre] (Pecs, Hajnoczy u. 25/A); KHOKHMAN, E. [Hohmann, Jeno] (Pecs, Jokai u. 5); YUKHAS, Sh. [Juhasz, Sandor] (Pecs, Uttero u. 60)

Fixation of radioactive elements on mineral coal and the character of the bond of uranium and humic acid. Acta Chimica Hung 35 no.2: 225-232 '63.

BARABAS, Andor, geologus, a foldtani tudomanyok kandidatusa (Pecs)
JURCSIK, Istvan, vegyeszmernek (Pecs); UPOR, Endre, vegyeszmernek
(Pecs)

Uraniferous ore and coal seams. Pt.1. Term tud kozl 7 no.9:
396-398 S '63.

P 40572-66 EnP(t)/EU LiPic) JP/AM/JD

ACC NR: AY6034711 SOURCE CODE: HU/0005/65/071/008/0334/0338

AUTHOR: Mohai, Miklosne--Mokhai, M. Upor, Endre, and Jurcsik, Istvan--Yurchik, I.^B
Plant for Experimental Research and Automation, Mecsek Ore Mining Enterprise, Pecs
(Mecseki Ercbanyaszati Vallalat, Kiserleti Kutatasi es Automatizalasi Oszt)

TITLE: Some problems in the determination of uranium with arsenazo-III

SOURCE: Magyar kemial folyoirat, v. 71, no. 8, 1965, 334-338

TOPIC TAGS: metal chemical analysis, uranium, arsenic compound, organic azo compound

ABSTRACT: The method described for the determination of uranium in ores containing low concentrations of uranium, based on the photometry of the uranium(IV)-Arsenazo-III complex, is basically similar to the method described by LUKYANOV, F. V., SAVVIN, S. B., and NIKOL'SKAYA, I.V., (Zh. Anal. Khim., Vol 15, 1960, p 311). Experiences gained in the use of this method during the last few years were described. A method suitable for utilizing liquid-phase reduction and reduction with titanium(III) was developed. The elements interfering with the determination are titanium, thorium, iron, and phosphorus. The removal of these was discussed.

Orig. art. has: 1 figure and 4 tables. [JPKS]

SUB CODE: 11,07 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 008

SOV REF: 009
Card 1/1

0921 1340

POLAND/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 2, 1959, 4361

Author : Jurczak, D., Koerner, K., Wojciecka, J., Suszcynska, A.

Inst :

Title : The Estimation of V and Ti in Highly-Alloyed Steels by
Electrolysis with a Mercury Cathode.

Orig Pub : Prace Inst Lotn, No 6, 11-20 (1958) (in Polish with
summaries in German, English French, and Russian)

Abstract : A previously reported (RZhKhim, 1955, 587) method for the
analysis of steels has been modified to adapt it to the
analysis of highly-alloyed and special steels for V and Ti.
A new-type electrolysis apparatus has been developed.
In carrying out the analysis, 1 gm of steel is dissolved
in 35 ml of dil (1:6) H_2SO_4 , 2 ml conc HNO_3 are added, the
solution is evaporated, the residue is cooled, diluted
with water to 150 ml, and allowed to stand to complete the
precipitation of Nb_2O_5 ; the solution is decanted,

Card 1/2

Card 2/2

JURCZAK, Krystyna

Chemical phase analysis of 40 Ni-20 Cr-20 Fe heat-resisting
alloys with variable tungsten and aluminum content. Inst
mech precyz 10 no.36:19-32 '62

*

JURCZAK, Krystyna

Amperometric determination of milligram amounts of aluminum in
the presence of titanium by use of the rotating platinum
microelectrode. Inst mech precyz 12 no.2:59-66 '64.

JURCZYGA, E.

Forced production and reduction of costs.

p. 24. (CHEMIK) (Warszaw, Poland) Vol. 10, No. 1, Jan. 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

L 18286-63

EWT(1)/EDS/ES(a)/ES(j)/ES(c)/ES(k) AMD/ATMIC Po-4
A/DD P/0044/63/000/006/0027/0035

ACCESSION NR: AP3001845

AUTHOR: Jurczak, M. (Physician)

(p)

TITLE: Reactions of human body to mechanical vibration

SOURCE: Wojakowy przeglad lotniczy, no. 6, 1963, 27-35

TOPIC TAGS: jet aircraft vibration mechanical body circuit, resonance frequency, mechanical vibration

ABSTRACT: The author discusses effects of mechanical vibration on the human body. He relates experimentally induced vibrations to those produced by aircraft. The vibration frequency of propeller driven aircraft is 25 to 75 cycles that of piston engine craft -- about 150 cycles and for jets the vibration frequency is about 1,000 cycles. Vibration is of major importance when rocket drive is used. Vibrations taking place in the airplane equipment are conveyed by structural elements to those part of pilot's body which are in immediate contact with the craft's parts, mostly to his back, buttocks and extremities. Some years ago it was established that parts of the human body respond to various rather low

Card 1/5

L 18286-63
ACCESSION NR: AP3001845

O

freqencies. A mechanical circuit representing the chest-abdomen parts by a spring and a weight has been devised. This is shown on Fig. 1 of Enclosure 1. It was established that resonance frequencies of the chin are 6 to 8 cycles of the larynx, bronchial ducts and trachea -- 12 to 16 cycles, of abdominal parts -- 4.5 to 10 cycles, of the pelvis and bladder -- 10 to 18 cycles, and of the muscular system -- 13 to 20 cycles. Body reactions to vibrations depend on parameters of the vibration source and the length of vibrational action. Vibrations of short duration have an effect like that of an acute stress to which the vegetative system reacts in a defensive manner with sharp vibrations the respiration and pulse become fast. During damping vibrations in muscles, the metabolic activity increases which is reflected by increased oxygen consumption as shown on Fig. 4 of Enclosure 2. Vibrations result in various psycho-physical reactions, such as delaying reaction of extremities, decrease in visual ability and hearing, dullness of depth sensations and disturbances in motion coordination. Individual reactions to vibrations differing from person to person also take place. These might be manifested in throat, abdominal or back pains, in a change of voice, in anxiety, frequent urination, inability to concentrate or drowsiness. When these reactions result from low frequency vibrations no lasting effects result.

Orig. art. has 5 figures.

2/5
Card

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619720002-4"

Cord 3/5

POLAND

BENHOWSKI, Boleslaw and JURCZAK, Marek. Military Institute
of Aeronautical Medicine (Wojskowy Instytut Medycyny Lot-
niczej)

"Directly Enlarged X-Ray Photographs for Diagnostics of
Small Animals."

Warsaw-Lublin, Medycyna weterynaryjna, Vol 19, No 1, Jan
63, pp 37-39.

Abstract: [Authors' English summary modified] Authors
describe a method and table which they devised to obtain
direct large x ray photographs to facilitate their reading
for diagnostic purposes in the examination of small animals.
There are 9 references, of which 4 are in Polish, 2 in
German, and one each in English and French.

1/1

ACC NR: AP7003320

SOURCE CODE: PO/0056/66/017/05-/0743/0753

AUTHOR: Jurczak, Marek--Yurchak, M. (Warsaw)

ORG: Laboratory of Experimental Morphology/headed by Prof. Dr. K. Ostrowski,
Military Institute of Aeromedicine, Warsaw (Pracownia Morfologii Eksperimental-
nej, Wojskowy Instytut Medycyny Lotniczej)

TITLE: Effects of chronic vibration on phosphorus-32 turnover in the central
nervous system

SOURCE: Acta physiologica polonica, v. 17, no. 5-6, 1966, 743-753

TOPIC TAGS: brain, central nervous system, aerospace medicine, occupational
disease, biologic vibration effect, brain cell disorder, brain morphology,
cerebral phosphate metabolism, cerebral lipid, cerebral nucleoprotein

ABSTRACT: Changes in P³² metabolism occurring in the central nervous system
during repeated exposure of the body to vibration were observed. A total of 120
guinea pigs were used in the experiments. Brain hemispheres including endbrain,
midbrain, thalamus were tested. The animals were exposed to vertical sinusoidal

Card 1/2

JURCZYK, J.

JURCZYK, J. Some remarks on the Czechoslovak sawmill industry. p. 323.

Vol. 7, no. 11, Nov. 1956
PRZEMYSŁ DRZEWNY
PHILOSOPHY & RELIGION
Warszawa, Poland

SO: East European Accession, Vol. 6, March 1957

JURCZYK, K.

JURCZYK, K. Welded construction of machines, apparatus, and containers.
Tr. from the German. p. 32

Vol. 4, no. 1/4, 1955
VARILNA TEHNIKA
TECHNOLOGY
Ljubljana

So: East European Accession, Vol. 6, no. 3, March 1957

STENGERT, Krzysztof; JURCZYK, Witold

Reaction of the organism to cold and its practical application
in surgery. Polski tygod. lek. 10 no.42:1381-1386 17 Oct 55.

1. (Z III Kliniki Chirurgicznej A.M. w Poznaniu; kierownik: doc.
dr. J. Borszewski. Poznan: III Klinika Chirurgiczna A.M. ul.
Szkolna 8/12.

(BODY TEMPERATURE,
hypothermia, surg. aspects, review)
(HIBERNATION,
controlled, review)

JURCZYK, Witold; STENGERT, Krzysztof.

Artificial hibernation in the treatment of shock. Polski tygod.
lek. 11 no. 4:145-148 23 Jan 56.

1. Z III Kliniki Chirurgicznej A.M. w Poznaniu; kier.: doc. dr.
Jerzy Boraszewski. Poznan, III Kl. Chir. A.M., ul. Szkołna 8/12.
(SHOCK, ther.
artif. hibernation)
(HIBERNATION, artif.
in shock)

POLAND/Human and Animal Physiology - Thermoregulation.

T-3

APPROVED FOR RELEASE 08/10/2001, 31 CIA-RDP86-00513R000619720002-4

Author : Bogacki Bogdan, Bentke Kazimierz, Jurczyk Witold,
Inst : Stengert Krzysztof
Title : - ON LAST PAGE -
Title : Experimental Investigation of the Exchange of Electrolyte
as Well as of Oxygen and of Carbon Dioxide in the Blood of
Dogs with Lowered Body Temperature.

Orig Pub : Polski prægl, chirurg, 1956, 28, No 8, 895-898.

Abstract : Thirteen dogs were cooled by immersion in a bath with a
temperature of 40°, and then warmed in a bath with a temperature of the
rature of 40°. On the average, the body temperature of the
dogs was before cooling 39°, after 20 minutes of cooling
30°, after 60 minutes 20°. Pulse rate dropped in 20 min-
utes from 107 to 105 per minute and was 53 per minute; af-
ter 60 minutes of cooling in addition, the rhythm of respi-
ration slowed from 40 to 18 per minute. Two dogs with a

Card 1/3

T-3

POLAND/Human and Animal Physiology - Thermoregulation.

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31549

mechanism of the change of concentration of K is vague
(possibly the egress of K takes place from the vascular
channel in the cells of tissues).

Inst: Z III Kliniki Chirurg. A.M. w Peknaw -
~~ZAKLADU~~

Z ZAKLADU DZIEŁOGLII OGÓLNIEJ I DZIENNIKOWEJ A.M. w Peknaw -
III KLINIKI CHIRURGICZNA A.M. -

Card 3/3

- 27 -

JURCZYK, Witold

STENGERT, Krzysztof; BENTKE, Kazimierz; JURCZYK, Witold

Changes of composition and sugar in the blood in hypothermia in
dogs. Polski tygod. lek. 12 no.19:701-704 6 May 57.

l. z III Kliniki Chirurgicznej A. M. w Poznaniu; kierownik: doc.
dr. med. Jerzy Borszewski i z Zakladu Patologii Ogolnej A. M. w
Poznaniu; kierownik: prof. dr. med. Antoni Horst. Adres: Poznan, ul.
Szkolna 8/12.

(HYPOTHERMIA, effects,
on blood (Pol))

(BLOOD SUGAR,
eff. of hypothermia in dogs (Pol))

JURCZYK, WITOLD

BINTEK, Kazimierz; STENGERT, Krzysztof; JURCZYK, Witold

Kidney function test in dogs during artificial hypothermia. Polski
tygod. lek. 12 no.19:704-706 6 May 57.

I. Z Zakladu Patologii Ogolnej i Doswiadczeniowej A. M. w Poznaniu;
kierownik: prof. dr. med. Antoni Horst i z III Kliniki Chirurgicunej
A. M. w Poznaniu; kierownik: doc. dr. med. Jersy Boraszewski. Adres:
Poznan, ul. Szkolna 8/12.

(HYPOTHERMIA, effects,
on kidney funct. in dogs (Pol))

(KIDNEY FUNCTION TESTS,
in hypotension in dogs (Pol))

POLAND

JURCZYK, Witold; KOTECKI, Andrzej and WIRGA, Zdzislaw;
Third Surgical Clinic (III Klinika Chirurgiczna), AM
Akademis Medyczna -- Medical School in Poznan, Director:
Prof Dr Med Adam PISKORZ.

"Acute Changes in the Respiratory Tract in the Post-Operative Course"

Warsaw, Polski Tygodnik Lekarski, Vol XVIII, No 8, 18 Feb
1963, pp 291-296.

Abstract: Authors' English summary modified] 5425 surgical cases are analyzed statistically for post-operative respiratory complications. The kind of operation, the region operated, the age of the patient and the kind of anesthesia used are taken into consideration. Acute changes in the respiratory tract during the post-operative course appeared in 12.1 percent of the patients. Mostly, inflammation of the

1/2

POLAND

Warsaw, Polski Tygodnik Lekarski, Vol XVIII, No 8, 18 Feb
1963, pp 291-296 (continued)

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respiratory tract and pneumonia were observed (10.4 and 5.7 percent respectively). Atelectasis was found in 16.7 percent of the patients, pleuritis in 7.1 percent, and infarction of the lung in 2.5 percent of the patients. Acute changes in the lungs during the post-operative period were observed more often after interventions in the epigastrium than in the hypogastrium. On the first day following the operation complications in the respiratory tract appeared in 23.5 percent of the patients. On the 10th day the percentage decreased to 3 percent. The percentage of acute complications increased in parallel to the age of the patient. Total morbidity in the post-operative course was 3.9 percent. 10 percent died because of acute changes in the lungs. 5 tables; 2 diagrams; 21 references, mainly Western.

2/2

JURCZYK, Witold; KRZYWINSKI, Rajmund; STENGERT, Krzysztof

Evaluation of the measurement of intrasophageal pressure during general anesthesia. Pol. przegl. chir. 35 no. 9:1081-1087 S '64

1. Z Zakladu Anestezjologii przy III Katedrze Chirurgii Akademii Medycznej w Poznaniu (Kierownik Zakladu dr. W. Jurczyk; kierowniki Katedry: prof. dr. A. Piskorz).

STENGERT, Krzysztof; JURCZYK, Witold; dr. med.; WOLOWICKA, Laura

Anesthesia in traumatic surgery. Pol. tyg. lek. 20 nc.12:436-438
22 Mr '65

1. Z Zakladu Anestezjologii przy III Katedrze Chirurgii Akademii
Medycznej w Poznaniu (Kierownik Zakladu: dr. med. Witold Jurczyk;
Kierownik Katedry: prof. dr. med. Adam Piskorz).

JURCZYK, Witold; KROLL, Jozef

On the restoration of respiratory and circulatory functions
in early Polish literature. Pol. tyg. lek. 19 no. 50:1944-1946
14 D '64.

1. Z Kliniki Chirurgicznej i Zakladu Anestezjologii przy I^{ej}
Katedrze Chirurgii Akademii Medycznej w Poznaniu (Kierownik
Katedry: prof. dr. med. Adam Piskorz).

JURCZYK, Witold, dr. med.; STENGERT, Krzysztof; GARSTKA, Jerzy; TOKARZ, Feliks; WOLOWICKA, Laura; WRUK, Marian, dr.

Measures for the restoration of suddenly arrested blood circulation. Pol. tyg. lek. 20 no.10:354-356 8 Mr '65

1. Z Zakladu Anesteziologii przy III Katedrze Chirurgii Akademii Medycznej w Poznaniu (Kierownik Zakladu: dr. med. Witold Jurczyk; Kierownik Katedry: prof. dr. med. Adam Piskorz); z Katedry I Kliniki Prtopedycznej Akademii Medycznej w Poznaniu (Kierownik: prof. dr. Wiktor Dega); z Katedry i Kliniki Neurochirurgii Akademii Medycznej w Poznaniu (Kierownik: doc. dr. med. Hieronim Powiertowski) i z Oddzialu Torakochirurgicznego Sanatorium PKP w Chodziezy (Ordynator Oddzialu: dr. Marian Wrult; Dyrektor Sanatorium: dr. Ryszard Raczynski).

GARSTKA, Jerzy; JURCZYK, Witali; STENGERT, Krzysztof.

The use of moderate hypothermia in the treatment of severe brain anoxia caused by abrupt stoppage of blood circulation due to body injuries. Chir. narzad. ruchu ortop. Pol. 30 no.2: 147-152 '65

1. Z Katedry i Kliniki Ortopedycznej Akademii Medycznej w Poznaniu (Kierownik: prof. dr. med. W. Dega) i z Zakładu Anestezjologii przy III Katedrze Chirurgii (Kierownik katedry: prof. dr. med. A. Piskorz).

SZULC, Henryk; MAJEWSKI, Czeslaw; JURCZYK, Witold; STRANGERT, Krzysztof;
KRZYWINSKI, Rajmund

Observations on the administration of viadril and viadril G
to rats. Przegl. lek. 21 no.6:432-434 '65.

1. Z Kliniki Chirurgicznej i Zakladu Anestezjologii przy
III Katedrze Chirurgii AM w Poznaniu (Kierownik Katedry:
Prof. dr. med. A. Piskorz) i z Zakladu Anatomii Patologicznej
Szpitala Miejskiego im. J. Strusia w Poznaniu (Kierownik:
Dr. med. C. Majewski; Dyrektor Szpitala: Dr. med. S. Andrzejewski).

14. **Indirect selling**

1970-1971. The first two years of the experiment were spent in establishing the experimental plots.

The following diagram illustrates the nature of construction and systematic work involved in industrial building construction, and a description of the mobilisation of points in such net. There are according to the area of the building site three essential groups, and the last one specifies the categories of workers in fixed areas, which are not included among the so-called mobile workers. The first group consists of the workers engaged in

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JURCZYNSKI, J.

Czasopismo Geograficzne - Vol. 25, no. 3, 1954.

E. Romer and W. Magacz' Polska, mapa fizyczna (Poland: a Map of Physical Geography);
a book review. p. 314.

SO: Monthly list of East European Accessions, EEAAL, LC, Vol. 4, No. 9, Sept. 1955
Uncl.

PADOVAN, Ivo, dr.; JURDANA, Stanko, dr.

Thalassotherapy in diseases of the respiratory system. Lijecn. vjesn.
557-564 '62.

1. Iz Otolaringoloskog odjela Bolnice "Dra Mladena Stojanovic" u
Zagrebu i Zavoda za talasoterapiju u Crikvenici.
(THALASSOTHERAPY) (RESPIRATORY SYSTEM dis)

JURECEK, H. ; JENIK, J.

"Mineralization of organic compounds with magnesium. V. Colorimetric
microdetermination of phosphorus in organic compounds. p. 1312"

P. 1312 (Chemicke Listy, Vol. 51, no. 7, July 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, 1958

NOVAK, V.; KOZAK, P.; VACULLOVA, D.; JURECEK, M.

Analytic aspects of the oxidation of organic nitrogen compounds by chromic acid. Pt. 3. Coll Cz Chem 28 no. 12: 3443-3446 D '63.

1. Technische Hochschule fur Chemie, Pardubice.

Determination of small amounts of organic arsenic compounds in air. M. Jurick. Collection Czechoslov. Chem. Communications 8, 408-70 (1934).—The vapors of volatile arsines can be removed from air by absorption on SiO_2 gel; they can be removed from smokes and suspensions in special wash bottles contg. a very volatile solvent. The first method applies especially to aliphatic arsines and the latter to aromatic arsines. The vapors of volatile arsines can be distd. from the silica gel into an oxidizing mixt. of Na_2O_2 and Na_2CO_3 and the nonvolatile arsines can be oxidized in soln. after the removal of the solvent by distn. The Gutzeit method can then be carried out for the colorimetric detn. of As. W. T. H.

ASA-LSA METALLURGICAL LITERATURE CLASSIFICATION

ECONOMICS

TECHNICAL

GENERAL

Microchemical determination of chlorine and bromine in organic materials. M. Jurek. *Collection Chimie et des Comunications*, 7, 316-18 (1935).—The method described depends upon the combustion of a few mg. of substance in a stream of O₂ with Pt as catalyst. The gaseous products of combustion are passed through a concd. soln. of Na₂S₂O₃ whereby NaCl or NaCl is obtained and the halide is titrated with Hg(No₃)₂ soln. with NaF-(CN)NO₃ as indicator (cf. Votek, *C. A.*, 12, 2177, 2348). The results obtained are excellent. W. T. R.

Chemical literature

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

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Active hydrogen. M. Hudlicky. Chem. Listy 40, 230-44 (1946).—Older expts. on active H data, were revised (Chuganoff-Zerwailian method). The following conclusions can be drawn: $\text{C}_6\text{H}_5\text{N}$ can be used as a solvent only when extremely carefully purified and dried. Even so 8 ml. $\text{C}_6\text{H}_5\text{N}$ and 2 ml. Origanic reagent evolved several breaths of a ml. CH_4 at room temp., and 1-2 ml. at 85° during 10 min. in a blank. PbO_2Me and Am-O were also used as solvents. The reaction of the 3rd H atom in primary amines may not be quant. and depends on the solvent and temp. If 2 primary NH_2 groups are present in one mol., the 4th H atom does not react, and the 3rd does not always react quantitatively. Secondary amines react completely, both in the cold and when heated. Amides of carboxylic acids react in $\text{C}_6\text{H}_5\text{N}$ with both H atoms at 85°, and almost completely with both H atoms at 20°. Inakles react quantitatively in the cold. Anilides of sulfonic acids give off both H atoms at any temp. in $\text{C}_6\text{H}_5\text{N}$. MeNO_2 gives off one H atom almost quantitatively at elevated temps. Aromatic nitro compds. without active H do not react at all in the cold. They give 0.1-0.8 equiv. of a H atom, when treated at 85° and the vol. of C_2H_4 measured after 10 min.

M. Hudlicky

H. abs.

C., Prozess, Park
Applied

672. Analysis of compounds simultaneously containing mercury, chlorine, bromine, iodine, sulfur, and nitrogen. Simultaneous determination of halogens and nitrogen in substances containing mercury. M. Jancsek (Cell. Czech. Atom. Chem., 1947, 12, 433-440).—The substance, mixed with O₂, is passed over a Pt wire, whereby the org. matter is burnt. The products of combustion are passed over red-hot Na₂CO₃ in a boat to absorb Cl, Br, and S, and over heated Ag dispersed on MgO to absorb I. After dissolution of the Na₂CO₃ in water, Cl⁻ and Br⁻ are determined by Votček's method or, in case of Br⁻, by the iodometric method of Leopert et al. (A., 1934, 1118) after transformation into BrO₃⁻. SO₄²⁻ is determined gravimetrically as BaSO₄. After dissolution of Ag and MgO in dil. HNO₃, the AgI is collected on a filter and weighed. A single sample suffices for the simultaneous determination of Hg in compounds free from N. The metal is deposited beyond the absorbent for halogen, or S is entrained into a tube containing Au and then weighed.
H. Wagn.

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10

1,2,6-Tri-methylpyridinium salts. K. Lukeš and M. Jureček. Collection Czechoslov. Chem. Commun. 13, 74-82 (1948) (in French); cf. C. A. 39, 23053.—The prep. of various 1,2,6-trimethylpyridinium salts, such as the bromide, chloride, iodide, etc., is described. A new one, the iodopolymethyl, $C_6H_5N(CH_3)_2I$, is described. It is prepared from 1,2,6-trimethylpyridine, iodine, and $Pb(OAc)_2$.
Thomas B. Niven

Thomas B. Niven

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619720002-4"

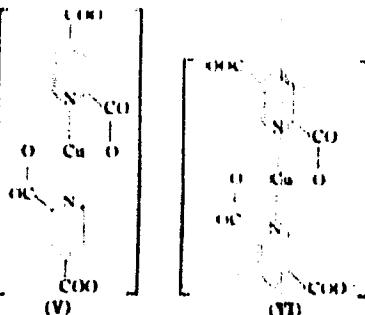
The iodophosphites of *N*-methylpyridine bases. R. Lukáš and M. Jureček. *Czechoslov. Chem. Commun.*, 13, 1857 (1948) (in French).—By reaction of the iodide of the base with $Pb(OAc)_3$ in aq. soln., the following iodophosphites were prep'd.: *N*-methylpyridinium ($C_6H_5N\cdot NiPh_3\cdot H_2O$), *N*-methyl-2,6-iodidium ($C_6H_5N\cdot Ni\cdot 2PbI_3\cdot 2H_2O$), *N*-methyl-3,5-iodidium ($C_6H_5N\cdot Ni\cdot 4PbI_3\cdot 4H_2O$), *N*-methyl-2,4,6-iodidium ($C_6H_5N\cdot Ni\cdot 4PbI_3\cdot 4H_2O$), *N*-methylquinoxalinium ($C_9H_7N\cdot Ni\cdot PbI_3\cdot H_2O$), and *N*-methylisoquinolinium, T. R. V. V.

A32-32A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619720002-4"

The copper salts of pyridinedicarboxylic acids containing at least one carbonyl in the α -position. M. Jurek and M. Jurcik, (Manufactures réunies de produits chimiques et métallurgiques, Prague). Collection Technol. Chem., Commun., 10, 131 (1948) (in French); cf. J. V. Dubsky and A. Okat, C.A. 36, 1294.—In the following, "but" stands for the butylate ion or radical (2,4-pyridinedicarboxylate), "box" for the isoquinonemate ion (3,6-pyridinedicarboxylate), and "dip" for the dipicolinate ion (2,6-pyridinedicarboxylate). By treatment of an $\text{Na}_2(\text{but})$ with CuSO_4 , there is obtained a ppt. of $[\text{Cu}(\text{H}_2\text{O})_4](\text{Cu}(\text{but}))_2 \cdot 4\text{H}_2\text{O}$ (I), a bluish cryst. powder, nearly insol. Heated to 230°, it loses $\frac{1}{2}$ of its water to give $[\text{Cu}(\text{H}_2\text{O})_4](\text{Cu}(\text{but}))_2 \cdot (\text{NH}_3)$. Cryst. I from aq. NH_3 gives $[\text{Cu}(\text{H}_2\text{O})_4](\text{NH}_3)[\text{Cu}(\text{but})_2] \cdot 4\text{H}_2\text{O}$ (II), a blue powder, and $[\text{Cu}(\text{H}_2\text{O})_4](\text{NH}_3)[\text{Cu}(\text{but})_2] \cdot 2\text{H}_2\text{O}$ (III), blue crystals. Both II and III, heated to 130°, lose their water of crystallization. Cryst. of I from 30% HNO_3 gives the free acid $\text{H}_2[\text{Cu}(\text{but})_2] \cdot 2\text{H}_2\text{O}$ (IV), as a microcryst., ultramarine powder. V, heated to 130°, loses its water to give an anhyd. blue Cu powder. IV is also formed by reaction of $\text{H}_2(\text{but})$ and $\text{Cu}(\text{AcO})_2$. The salts $\text{Na}_2[\text{Cu}(\text{but})_2] \cdot 3\text{H}_2\text{O}$, $\text{K}[\text{Cu}(\text{but})_2] \cdot 2\text{H}_2\text{O}$, and $(\text{NH}_3)_2[\text{Cu}(\text{but})_2] \cdot 2\text{H}_2\text{O}$ were prep'd. The normal salt $[\text{Cu}(\text{H}_2\text{O})_4][\text{Cu}(\text{but})_2] \cdot 2\text{H}_2\text{O}$ was formed from $\text{Na}_2(\text{but})$ and CuSO_4 . To the complex ion $[\text{Cu}(\text{but})_2]$ is ascribed the structure V.

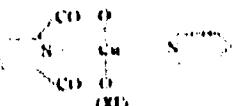


The normal salt, $\text{Cu}(\text{isoec})_2 \cdot 4\text{H}_2\text{O}$ (VII), was prep'd. from $\text{Na}_2(\text{isoec})$ and CuSO_4 in the form of a blue microcryst. powder, insol. in water. VII cryst. from concd. aq. NH_3 gives $[\text{Cu}(\text{NH}_3)_2][\text{Cu}(\text{isoec})_2] \cdot 4\text{H}_2\text{O}$ (VIII). VIII loses 4 mols. of NH_3 and 1 of H_2O on exposure to the air to give $[\text{Cu}(\text{NH}_3)_2][\text{Cu}(\text{isoec})_2] \cdot 2\text{H}_2\text{O}$, which in turn loses its H_2O of crystallization. Evapn. of the mother liquor from the prep'n. of VIII gives $[\text{Cu}(\text{NH}_3)_2][\text{Cu}(\text{isoec})_2] \cdot 2\text{H}_2\text{O}$. The complex ion $[\text{Cu}(\text{isoec})_2]$ has the structure VI. The sol.

salt $\text{Cu}(\text{dip})_2\text{H}_2\text{O}$ (IX) was prepd. from $\text{Na}(\text{dip})$ and CuSO_4 and also from $\text{H}_2(\text{dip})$ and $\text{Cu}(\text{Ac})_2$. NaOH gives a $\text{Cu}(\text{OH})_2$ ppt. with IX. IX loses its 2 mols. of water at 130° . Its structure is that of a normal salt, not an inner complex. IX, crystd. from aq. NH_3 gives a salt X with the empirical formula $\text{Cu}(\text{dip})_2\text{NH}_3\text{H}_2\text{O}$. X loses 2 mols. of NH_3 and 1 of H_2O in the air to give a product which is insol. and stable to 130° . X decomposes in boiling water. To X is ascribed the structure $\text{NH}_3\text{OCOC}\text{C}_6\text{H}_{11}$.

$\text{CH}_2\text{CH}_2\text{CH}_2\text{C}_6\text{H}_4\text{NCOOCu}(\text{NH}_3)_2\text{OH}\text{H}_2\text{O}$. IX, crystd. from aq. concn. MeNH_2 , gives an analog of X, in which each of the 3 NH_3 groups is replaced by MeNH_2 . This compd.

loses 2 mols. of MeNH_2 to the air giving $\text{MeNH}_2\text{OCOC}\text{C}_6\text{H}_{11}$.
 $\text{CH}_2\text{CH}_2\text{CH}_2\text{C}_6\text{H}_4\text{NCOOCuOH}$, which is stable to 130° . IX crystal. from pyridine gives a compd. that is stable to air and heat to 130° , slowly sol. in hot H_2O , liberating pyridine. It is given the complex structure XI:



(XI)

IX crystal. from HNO_3 (d. 1.2) gives the acid salt $\text{H}_2\text{Cu}(\text{dip})_2\text{H}_2\text{O}$, which is slightly sol. in cold H_2O to give a soln. that is acid to litmus. The following metal salts were prepd.: $\text{Na}_2\text{Cu}(\text{dip})_2\text{H}_2\text{O}$, $\text{K}_2\text{Cu}(\text{dip})_2\text{H}_2\text{O}$, and $(\text{NH}_3)_2\text{Cu}(\text{dip})_2$. The $\text{Ca}(\text{dip})_2\text{H}_2\text{O}$ of Epstein (Anal. 231, 1 (1943)) was not confirmed. G. W. Hwing

JURECEK, M.; JENIK, J.

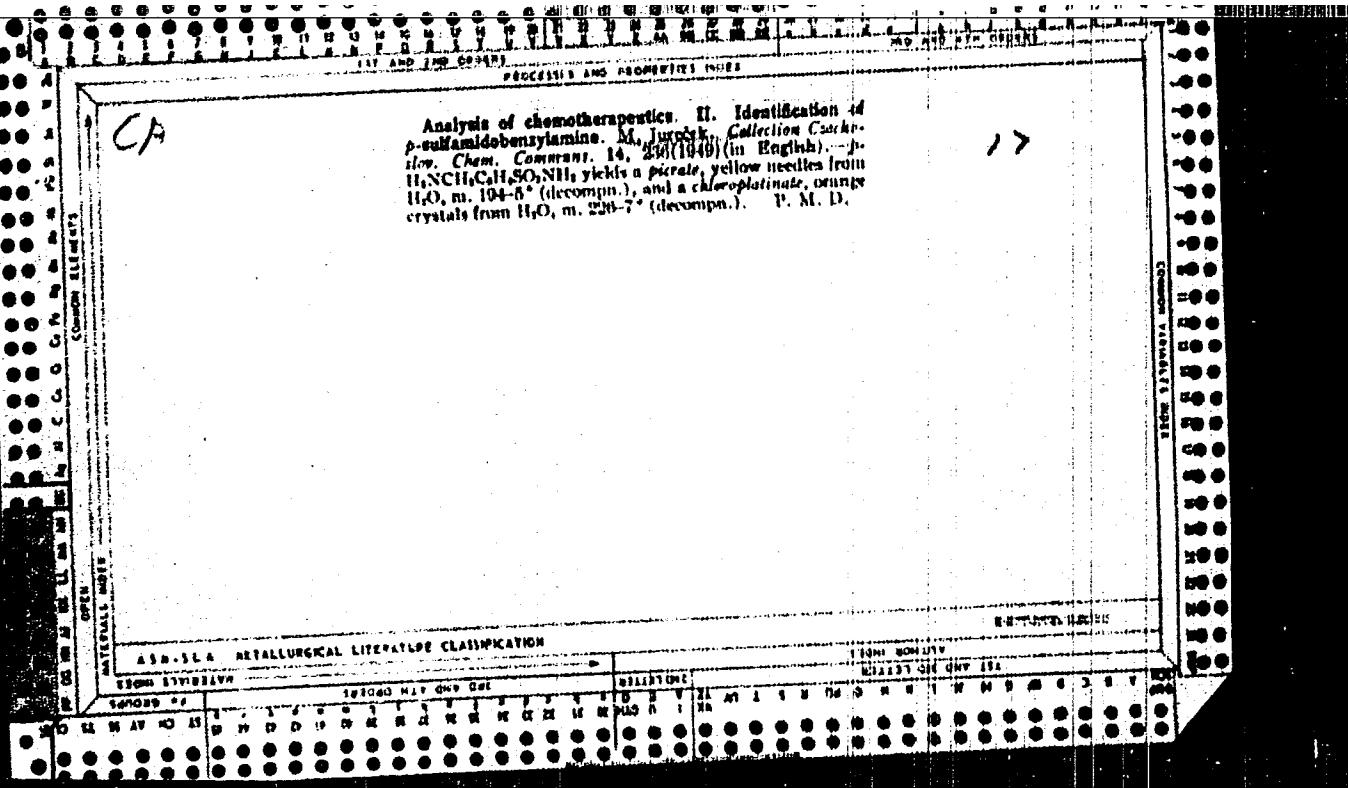
Microdetection of arsenic in organic and inorganic compounds by mineralization using magnesium. p. 1774

Vol. 48, no. 12, Dec. 1954
CHEMICKE LISTY
Praha, Czechoslovakia

So: Eastern European "cession Vol. 5, No. 4, 1956

CH

Determination of the carbonyl group by the hydroxyl-amine method. J. Wanka, M. Jurásek, and V. Šolánek (Research Inst. of United Chem. Ind. Works, Purdubický Rybitví). *Collections Czechoslov. Chem. Commun.*, 14, 162-76 (1949) (in English).—A general method for the detg. of the carbonyl group (II) in aq. or alc. soln. consists of the reaction of I either with NH₂OH.HCl followed by titration of the liberated HCl, or with excess NH₂OH followed by titration of the unreacted base. The equivalence point is detd. potentiometrically. An Sb electrode is used if the detg. is made in aq. soln. and a bimetallic pair of Te-Pt electrodes if in an alc. soln. The method cannot be used for the detg. of Pb₂CO or for keto acids in aq. soln. Data for a variety of aldehydes, ketones, keto esters, and sugars show a comparison of the capil. and the theoretically expected results as well as indicate the variations in time and temp. of reaction needed in the individual cases. Accuracy to within $\pm 0.2\%$ is obtainable. A review of methods for detg. I by using PhNNHNH₂ and NHCONH₂ is given. 16 references. H. L. W.



Colorimetric determination of small quantities of *m*-dinitrobenzene in some aromatic mono-nitro compounds
M. Hudlicky, Chem. Listy 43, 314-314 S(1949). Aromatic nitro compds. contg. 2 or 3 nitro groups in meta position give with NaOH in MeCO soln. intensive red, violet, or blue colorations. Compds. of o- or p-series do not react. The groups: OH, OCOCH₃, NH, NHR, NRR', NHAcetate, OMe, COOH, and COOR do not. 2,4-Dinitroethylene, trinitromethylene, and trinitro-1,3-dimethyl-5-butylbenzene give no color reaction. The method was worked out for the detn. of *m*-dinitrobenzene in an excess of *m*-chloronitrobenzene, *p*-chloronitrobenzene, *p*-chloronitrobenzeno, and nitrophenoxide. Attempts to use the method in the presence of nitrophenols were unsatisfactory.

M. Hudlicky

CA

Bellstein halogen test. M. Jureček and F. Mužík (Research Inst. Czech. Chem. Works, Pardubice-Rybítví). Collection Czechoslov. Chem. Commun. 15, 236-8(1950)(in English).—Compds. which give volatile Cu derivs. will give a green flame. Examples are acetylacetone, dicyandiamide, salicylaldoxime, and 2-mercaptothiazole. If CuSCN can be formed, a green color may be observed.

K. G. Stone

*BB**C
3*

1209. Analysis of pharmaceuticals. III. Estimation of imipentacine in antipyrene. M. Jarotek and M. Vodra (Coll. Tech. Chem. Technol., 1960, 18, 937-940). For iodometric titration, antipyrene (~0.1 g.) in CHCl_3 (20 ml.) and water (80 ml.) containing cryst. Na acetate (2 g.) is shaken for 20 min. with 0.1N-I (25 ml.); excess I is titrated with 0.1N-Na₂S₂O₃ until the violet colour in the CHCl_3 disappears. Antipyrene is almost quantitatively extracted from alkaline solutions by CHCl_3 , which does not remove 1-phenyl-3-methylpyrazol-5-one alone or in presence of antipyrene. 1-Phenyl-3-methylpyrazol-5-one can be determined alone or in presence of antipyrene by titration in the ethanol with 0.01N-NaOH in presence of phenolphthalein. To determine small amounts of 1-phenyl-3-methylpyrazol-5-one in presence of a large excess of antipyrene, the solution of the latter substance (~5%, 3 ml.) is mixed with a 1% solution (3 ml.) of quinine and extracted with CHCl_3 (5 ml.) after exactly 10 min.; in presence of 1-phenyl-3-methylpyrazol-5-one the CHCl_3 layer acquires a pink to purple colour. For the detection of phenylhydrazine in antipyrene, 2N-MCl (0.4 ml.) and a crystal of Se(?) are added to 3 ml. of an ~6% solution of the antipyrene to be tested. After 1-2 min., the mixture is treated with 1 ml. of a solution of 1-naphthylhydrazine (0.5 g.) in a boiling mixture of glacial acetic acid (30 ml.), water (70 ml.) and 20% Na acetate (1 ml.). The presence of phenylhydrazine and its salts cause a pink to purple coloration which intensifies after addition of 1 drop of conc. HCl. The reaction is distinctly positive with 0.15 mg. of phenylhydrazine. When phenylhydrazones are to be detected, the solution (3 ml.) is evaporated.

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Analysis of commercial dimethyl sulfate. M. Jurek.
Chem. Zvesty 44, 134 N (1960).—Com. Me_2SO_4 (I) is analyzed for I, MeOSO_2H (II), and H_2SO_4 . I is hydrolyzed to II by allowing 0.8-0.9 g. sample to stand 1.5 hrs. with 25 ml. cold 0.6 N NaOH with occasional shaking. Back-titration with 0.6 N HCl (bromocresol green) gives the amt. of I + II + H_2SO_4 . The amt. of II + H_2SO_4 is found by direct titration with NaOMe. A 1-g. sample is dissolved in 20 ml. MeOH or RCOH and titrated with 0.6 N MeONa (bromocresol green). H_2SO_4 is detd. gravimetrically after the hydrolysis of I and back titration of excess NaOH. The sample is diluted with water to 250 ml., 1 ml. HCl, 2 g. NaCl, and 50 ml. 2% BaCl_2 soln. are added. BaSO_4 is weighed after 12 hrs. The titer of MeONa in MeOH is detd. by titration with BaOH (phenolphthalein) or 0.6 N HCl (bromocresol green). To det. I only the detn. is carried out in the Zehnd app. for detn. of Metl groups and is based on the transformation of I to Metl by the action of KI. A 20-5-mg. sample and 1 g. KI in 2 ml. water are allowed to react at room temp. for 0.6 hr., then 0.6 hr. at 80°, and Metl is detd. in the usual way. M. Budlick

ca

17

ANALYSIS of pharmaceuticals. III. Estimation of Impurities in antipyrine. M. Jirusek and M. Vetsa (Czechoslovak Chem. Works, Pardubice-Rybitvi). Collection Czechoslov. Chem. Commun. 15, 937-45 (1961) (in English)
—See C.A. 45, 72094. Harold H. Levine

1962

CA

A new procedure for the identification of alkyl groups attached to oxygen and nitrogen. M. Jureček and M. Vrba (Czech. Chem. Works, Pardubice-Kybly). *Collection Czech. Chem. Commun.*, 16, 92-4 (1951) (in German).—The R is split from R-O- with III in a Zeisel app. for the lower alkyl groups, and Shaw's method (C.A. 41, 7816) is used for the higher groups. The alkinide app. is used with R-N, the III salt being decompd. by heat. The RII is converted to the S-biothiourea with thiourea and the pivate of this deriv. is prep'd. Identification of higher alkyl halides and dihalogen compounds. *Ibid.* 94-9.—The S-alkyl-biothiourea picrates (I) (C.A. 22, 646) of some alkyl halides with more than 7 C atoms have been prep'd. and their m.p.s. detd. The mixed m.p.s. may be used in differentiating compds. the m.p.s. of whose I derivs. differ by a small temp. interval only. Tabulated data record the mixed m.p.s. of the I derivs. of 8 alkyl halides contg. 7-12 C atoms. S-Alkyl bio(isothiourea picrates) of polymethylene dihalogen compds. have been prep'd. The corresponding m.p.s. of these derivs. of the following compds. are: 1-bromooctane 135-0°, 2-bromooctane 131-2°, 1-bromo-2-ethylhexane 135-8°, 1-bromononane 131°, 1-bromodecane 137°, 1-bromobendecane 138-9°, 1-iodododecane 130°, PhCH₂Cl 187°, HOCH₂CH₂Cl 155-6°, CH₂I₂ 232° (decompn.), (CH₂Cl)₂ 207° (decompn.), (CH₂Br)₂ 207° (decompn.), Br(CH₂)₂Br 247° (decompn.), Br(CH₂)₃Br 218°, Br(CH₂)₄Br 214°, Br(CH₂)₅Br 193°. W. M. Potts

27

BTR

771* Identification of Some Higher Alkyl Halides and
Dehalogenated Paraffines. (In German.) M. Jutysk and M.
Vecera. Collection of Czechoslovak Chemical Communications,
v. 16, Feb. 1, 1951, p. 95-99.
Brief description of procedure includes tabular data. 11 ref.

ca

17

Analysis of pharmaceuticals. III. Determination of impurities in antipyrine. Miroslav Janáček and Miroslav Vodrážka (Czech. Chem. Works, Prague-Rybitví). *Chem. Listy* 45, 20-32 (1951); cf. *C.A.* 43, 9374b; 44, 9622d.—Phenylhydrazine (I) in antipyrine (II) is detd. from the difference between the iodometric titration of a sample before and after extg. I with 2 N NaOH (II is recovered by CHCl_3 extn. of alk. liquid). Also, I can be titrated directly with 0.6 N alc. NaOH in abs. EtOH. Small amts. of I are detd. colorimetrically: I and quinones give a reddish brown color. This is extd. after 10 min. with CHCl_3 (purple color) and measured after 20-30 min.; 0.02 mg. of I can be detected by this reaction. PANHNH_2 is detected as follows:

a) To 3 ml. 5% soln. of the sample is added 0.6 ml. 2 N HCl and a crystal of BaCO_3 . After 1-2 min., 1 ml. of 0.3% soln. of 1-naphthylamine in 30% AcOH and 1 ml. 20% AcONa are added. In the presence of at least 0.15 mg. PhNNH₂, a rose to crimson color is developed which intensifies after the addition of a drop of concn. HCl. b) Three ml. of a 5% soln. of II being tested for PhNNH₂ is treated with 5 drops of a soln. of Na (4-*formylphenyl)-2-naphthol-3,8-dimethoxy (III) and 1 ml. 20% NaAc. The color turns from orange to violet in the presence of at least 0.16 mg. PhNNH₂. Prepn. of III: A cold suspension of 0.2 g. $\rho\text{-OCH}_2\text{C}_6\text{H}_4\text{NH}_2\text{HCl}$ in 10 ml. H₂O and 4 ml. HCl is treated with 2.6 ml. 0.6 N NaNO₂, and the soln. is added to 0.4 g. Na-*naphthol-3,8-dimethoxy* in 150 ml. 3% soln. of NaCO₃. To detect PhNNH₂, 1 ml. 5% eq. soln. of II is alkalinized with 1 ml. 2 N NaOH, PhNNH₂ is extd. with Et₂O, the ext. treated with 1 ml. 2 N HCl, evapd. to 2 ml. vol., alkalinized with 1.6 ml. 2 N NaOH, and treated with NaOCl solution. If 0.2 mg. PhNNH₂ is present, a red color is developed.*

M. Hudlicky

1957

CA

10

The applicability of the Kuhn-Roth methyl determination method to the solution of structural problems in the terpene series. František Petráš, Míraďav, Jureček, and Jan Kovář (Tech. Univ., Prague, Czech.). *Chem. Listy* 45, 900-3(1951). The effect of structure of cyclic compds. on the yields of AcOH in the C-methyl detn. (Kuhn-Roth method) was followed. Branched cycloparaffins give low yields of AcOH. With the exception of isomerizable compds., the results are reproducible under the same conditions. However, no relations can be drawn between the structure and yield of AcOH. The following consts. are reported (d_{4}^{20} , n_{D}^{20}): methane, 0.7097, 1.4405; isopropylcyclohexane, b.p. 38.2-8.5°, 0.8054, 1.4413; isopropenylcyclohexene, b.p. 39-40°, 0.8202, 1.4700; menthene, b.p. 40.8-50.2°, b.p. 167-9°, 0.8131, 1.4513; methyleclopentane, b.p. 50.5°, 0.7302, 1.4126; 1-methyleclopentene, b.p. 71.5°, 0.7808, 1.4200; menthone, b.p. 85°, 0.8053, 1.4503; pulegone, b.p. 94-0°, 0.9101, 1.4810; thujone, b.p. 151°, 0.8115, 1.4423; α -thujene, b.p. 44.5°, 0.8234, 1.4550; β -sabinene, b.p. 46-8°, 0.8208, 1.4070; thujyl ale., b.p. 94°, 0.9173, 1.4437; δ -sabinol, b.p. 88.5-9°, 0.9195, 1.4998; δ -sabinyl acetate, b.p. 104.6°, 0.9704, 1.4698; thujone, b.p. 194°, 0.8110, 1.4317; pinane, b.p. 103.5-4°, 0.8810, 1.4643; α -pinene, b.p. 132-4°, 0.8019, 1.4620. M. Hudlický

Analytical (Normal)

CA

Simultaneous determination of mercury and halogens or sulfur in nitrogen compounds. Analysis of compounds containing mercury along with chlorine, bromine, iodine, sulfur, and nitrogen. II. Miroslav Hudlický und Miroslav Vrba (Chem. Research Inst., Pardubice-Rybářov). *Chem. Listy* 45, 445-6(1951); cf. C.A. 42, 2344x. Org. compds. are burned in a stream of O over a Pt contact, and Cl, Br, and S

are removed from the combustion products by absorption in anhydrt. Na_2CO_3 , and I and S are removed by Ag. Hg and $\text{Hg}(\text{NO}_3)_2$, which deposits on the cool places, are forced through a Cu spiral heated in a CO_2 atm. and absorbed and weighed in Ag wool. The Na_2CO_3 is dissolved in dil. HNO_3 , Cl or Br pptd. as AgCl or AgBr , resp., and the filtrate pptd. with $\text{Ba}(\text{NO}_3)_2$. When Hg, S, and I are present, S and I are absorbed in Ag. The Ag is dissolved in dil. HNO_3 , AgI filtered off, and the filtrate treated with $\text{Ba}(\text{NO}_3)_2$. M. Hudlický

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CIA-RDP86-00513R000619720002-4

CA

Evaluation of elementary analysis. Miroslav Jurečka. — Chem. Listy 45, 463–9 (1961).—A review with 87 references; M. Hudlický

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CIA-RDP86-00513R000619720002-4"

CA

17

Analysis of pharmaceuticals. IV. Colorimetric determination of phenylhydrazine and phenylhydrazone in antipyrene. Miroslav Večerka and Miroslav Jureček (Chim. Met. Works, Pardubice-Rybíček, Czech.). ČAS. Lidský 45, 173-7(1961); cf. C.A. 45, 72094. --The colorimetric detn. of PhNH_2NH_2 (I) is based on the Postowky reaction, i.e. on the oxidation of I with SeO_4^- to PhN_2X and its coupling with α -naphthylamine (II). The resulting red dye has its absorption max. at 530-5 m μ and is practically stable. The oxidation with SeO_4^- is carried out in HCl soln. and requires 18 min.; the coupling is at pH 3-5 and requires 3 min. for its completion. If phenylhydrazone are to be detd., hydrolysis with HCl 1:1 on a steam bath in a stream of an inert gas is required prior to detn. The following procedure was adopted for the estn. of I and phenylhydrazone in antipyrene: A sample of antipyrene (0.5-1 g.) is refluxed with 5 ml. dil. HCl (1:1) in a stream of N_2 for 1 hr. The soln. is then dild. to a certain vol., an aliquot is dild. to 4 ml. with H_2O and treated with 0.5 ml. 2 N HCl and 1 ml. 2% soln. of SeO_4^- for 15 min. Thereafter, 1 ml. of a soln. of II, prepd. by dissolving 0.3 g. II in 30 ml. AcOH and filled up to 100-ml. vol. with H_2O , is added, then 2 ml. 30% NaOAc. After 5 min., 0.25 ml. 30% HCl is added, the vol. made up to 100 ml., the Se centrifuged, and the extinction measured with a green filter. Results are read by means of a calibrating curve made for $\text{PhC}_6\text{H}_4\text{NH}_2\text{Ph}$. M. Hudlický

MURCCC

oxygen and nitrogen. M. J. Lefebvre, S. Moroni, G. Lelaud, *J. Prac. Conf. Anal. Chim.*, 1957, 24(1052) (Publ. 1958). H. cl. C.A., 46, 2478c.—Identification through vinylogous salts of Sulkyliothioureas has certain advantages over other methods. RBr and RI is refluxed in *in situ* d.c. (either acetone) soln. of thiourea (10-15 gms. (addn. of NaI is needed with RCl), a suitable acid is added, and the salt of Sulkyliothioureas (or of S-alkylenethiothioureas) with alkyl-ene dihalides is allowed to crystallize on cooling, if necessary after diln. with water. Picrates have sharp m.p.s., but are somewhat sol. Perchlorates crystallize well, but have very high m.p.s. 8,5-Dinitrobenzoate are judged best, they crystallize well, and m.p.s. are widely different in different derivs. Styphnates are appreciably sol., and often sep. as oils. *p*-Toluenesulfonates and perchlorates are appreciably sol., while oxadates and nitrate do not sep. in practical concns. Derivs. of tertiary halides could not be prep'd. For the identification of the OS group, the RI is first prep'd by boiling with HI in a standard app. for the d.c. of methoxyl, absorbed in EtOH or acetone, and treated as above. Compds. itself, in boiling HI are first dissolved in molten phenol, acetamide, etc. Red P is added with HI. The time of boiling (1-2 hrs.) depends on the volatility of the RI. 5-10 mg. samples are treated with HI and the NaI, and dissolved (externally) in any app. for the d.c. of the methylium group; the RI is then treated as above. In microdetach., 10-30 mg. of sample of halide is treated with an acetone soln. of thiourea in sealed tube at 100° (RI). 1 hr.; RBr, 2 hrs.; RCl, 3 hrs. with the addn. of NaI. The soln. is evapd. to dryness in a microptif. tube, dissolved in water, and ptd. with a 2% soln. of Na 4,5-dinitrophenazeth. The ppt. is dissolved by heating, allowed to crystallize slowly, and recrystd. from hot water (app. R(OH) with higher alkyls). For alkyls on O and N, 15-30 mg. of sample is treated with HI as above, RI absorbed in a cooled soln. of thiourea in

JURECEK, M.; VECERA, M.

"Identification of organic substances.III. Studies on alkyl thiuronium salts", P. 722., (CHEMICKÉ LISTY, Vol. 46, No. 12, Dec. 1952, Praha, Czechoslovakia)

SC: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

JURECEK, MIROSLAV

Jurecek, Miroslav Prednasky z analysy organickych latek. (Vyd. 1) Praha, Statni pedagogicke nakl., 1953 160 p. (Ucebni texty vysokych skol) (Lectures on the analysis of organic compounds. Bibl.)

SO: Monthly List of East European Accessions, L C., Vol. 3, No. 1, Jan. 1954, Uncl.

JURECEK, MIROSLAV

Pirucka pro cviceni z kvalitativni organické analyzy. Miroslav Jurecek [a]
Miroslav Vecera. [Nyd. 1.] Praha, Statni pedagogicke nakl., 1953. 208 p.
(Ucebni texty vysokych skol) [A manual for exercises in qualitative organic
analysis]

SO: Monthly List of Acquisitions, Library of Congress, Vol. 3, No. 3
March 1953, Uncl.

Identification of organic compounds. V. Relation of halogen derivatives with thionates. Minority Velocity Method

21 March 2018

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619720002-4

JUREK, M.

Chemical Abst.
Vol. 42
Apr. 10, 1954
Gene Land Physical Chemistry

1954
Lip-Walk, M. Jurek, Chem. Abstr. 47, 1737-8 (1954).
M. Jurek

(3)

M. Jurek

9/16/59 JM

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619720002-4"

JUREČEK, M.

85. Identification of organic compounds. III.

Alkylthiuronium salts. M. Jureček and M. Vodrážka.

(*Coll. Czech. Chem. Comm.*, 1954, **19** (1), 77-84).

Various alkylthiuronium salts are investigated for the identification of alkyl and halogenalkyl groups

attached to O or N. The unknown substance is heated with III; the alkyl iodide formed is characterised by conversion to the thiuronium iodide and thence to its picrate (*cf. Chem. Listy*, 1951, **45**, 140 and 150) or another salt. 3; 6-Dinitrobenzoates are now recommended on account of their lower solubility in alcohol. Other salts examined include styphnates, picromates, toluene-p-sulfonates, oxalates, nitrates and perchlorates. [This is a translation into German of a paper that appeared in *Chem. Listy*, 1952, **46**, 722.] D. R. GRASSO

MS-15

JURČEK, M. STEPAN, J., KRAL, V.

CZECHOSLOVAKIA

Ueber Cholinnicotinsaureprodukte

From the Institute for Medical Chemistry of Charles University, Plzen and the
Chair for analytical chemistry of the Chemical-Technological University in Pardubice.

SO: Die Pharmazie, December, 1955, Unclassified.

✓ Microdetection of carbon in organic and inorganic compounds by means of magnesium fluxes. M. Ježek
(Tech. Hochschule Česká, Praha, Czechoslovakia)
Chem. Abstr. 1953, 1088 (in German). -- By ignition of org. compds with metallic Mg, the org. mol. is broken down to C, H is set free as such, and other elements such as N, halogens, S, P, and As combine with the Mg to form carbides; and these give $\text{CH}_2\text{C}\equiv\text{CH}$ with water. Acetylene derivs. give a sensitive test with solns. of Cu^{+} salts with the formation of a reddish or yellow ppt. Carbonates are reduced to carbides and treatment with water sets free easily detec-
table acetylene hydrocarbons.

W. T. Hill

V Microdetection of arsenic in organic and inorganic compounds with mineralization by means of magnesium. Miroslav Jurek and Josef Jeník. Collection Czechoslovak. Chem. Commun., 20, 650-6 (1955) (in German).—See C.A. 49, 4443c.

B. J. C.

(1)

A. J. C.

JUREČEK, M.

CZECH

✓ The chelating ester of alcohols acid. J. Štěmber, V. Kral, and M. Jureček (Karlovy Vary, Příbram, Czechoslovakia), ČAS, Listy v. 7, 144-5 (1955).—Refining 12.5 g. *nicotinic acid* (I) with 4 times the amt. of SOCl_2 0.5-1 hr., evapg. the soln, in excess to 250 ml., adding 137.8 g. $\text{HOCH}_2\text{CH}_2\text{NH}_2\text{Cl}$ (II), and crystg. the solidified mixt. from 60% EtOH gave 40% 3-C₂H₅NCO₂CH₂CH₂NH₂Cl (III), m. 200-3°, resistant to hydrolysis by refluxing 6 hrs. with dil. alkalies or 3 hrs. with dil. HCl. Treatment of 8 g. III with Ag_2O in H_2O gave I (free and as Cu salt), and an addn. compd. of II with 8 HgCl₂. *Dipicrate* of 3-C₂H₅NCO₂CH₂CH₂NH₂ (C₂H₅N₃O₆), m. 184-5°; *diperchlorate*, m. 214.5-16° (from H_2O); *trinicotinic acid chloride* (dihydrate), m. 170-1° (from 60% EtOH); *di(chloroaurate)*, m. 230-1° (from 60% EtOH contg. 5% HCl). Paper chromatography on Whatman paper no. 1 at 18° in mixts. 4:2:1 $\text{BuOH}\text{-PrOH-H}_2\text{O}$ 2:8:2 $\text{PhCH}_2\text{OH-PrOH-H}_2\text{O}$, and 4:1:5 $\text{BuOH}\text{-AcOH-H}_2\text{O}$ gave the following *R*_f values: for I 0.38, 0.51, 0.70; for II 0.14, 0.33, 0.27; for III 0.00, 0.14, 0.18. M. Hudlický

~~TURECK M.~~**C Z E C H**

Colorimetric determination of traces of arsenic in organic and inorganic compounds with magnesia mineralization. M. Lureck and J. Lenk. (Vysoká škola chem.-technické, Pardubice, Czech.). *Chem. Listy* 49, 264-6 (1955).--The detn. of As is based on the formation of a red color in the reaction of AsII with a pyridine soln. of Bi(NCS)₃ (I) (absorption max., 5000 Å.). Mineralization is carried out by decomps. of the As compd. with 40% H₂SO₄ and AsII is adsorbed in I (*C.A.* 49, 4443e). M. Hudlický

JUREČEK

Volumetric microdetermination of constituent arsenic in organic compounds after mineralization with magnesium.

Stanislav Jureček and Josef Jeník (Vysoká škola chemicko-technologická, České Budějovice, Česká republika, Čechy); *Czech. Urt. 30, 184 (1976)*; *cf. C.A. 49, 9932f.* — Org. As is transformed by fusing with Mg into Mg_3As , which is decompd. with dil. H_2O_2 , the AsH_3 expelled by a N or CO_2 stream into Br water, and Hg_2Cl_2 detd. iodometrically. Weigh 0.4 mg. of a compd. into the mineralization tube (C.A. 49, 443e), add a 35-40-mm-thick layer of Mg, ignite + 5 min., seal the tube, allow to cool, cut into 3 pieces, put them into the app. which has a gas-inlet tube, fill the absorption vessel with 10 ml. Br water (prepd. by shaking 1 g. Br with 10 ml. H_2O), flush the app. with N or CO_2 , add 10 ml. 40% Hg_2Cl_2 from the dropping funnel, pass the N or CO_2 5 min. through the app., transfer the contents of the absorption vessel into a 100-ml. titration flask, add 1 g. NaOAc and 3 drops of HCO_3H (to destroy the excess Br); wash the absorption vessel 3 times with 5-ml-portions of boiled HCl, add 2 ml. 4% soln. of KI , expel the air from the flask with a stream of N_2 , allow the flask to stand 15-20 min. in the dark, and titrate with 0.01N $Na_2S_2O_3$.

JURECEK, MIROSLAV.

Organicka analýsa. (1. vyd.) Praha, Nakl. Československé akademie ved. (organic analysis; a university textbook. 1st ed. illus., bibl., footnotes, indexes)

Vol. 2. 1957. 461 p.

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, no. 5, May 1958

Jurecek. M., and others.

"Simultaneous detection, identification, and determination of secondary and tertiary alcohols on a microscale." In German.

p. 1809. (Sbornik Chekhoslovatskikh Khimicheskikh Rabot, Vol. 22, No. 6, Dec. 1957, Praha, Czechoslovakia)

Monthly index of East European Accession (EEAI) LC, Vol. 7, No. 8, August 1958

Miroslav Jurecek
CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
Organic Substances.

E-3

Abs Jour : Ref Zhur - Khim., No 10, 1958, No 32220
Author : Jiri Gasparic, Miroslav Vecera, Miroslav Jurecek
Inst : -
Title : Identification of Organic Substances. XVI. Identification of Sulfides.
Orig Pub : Chem. listy, 1957, 51, No 4, 660-666; Collect. czechosl. chem. communs, 1958, 23, No 1, 97-104.
Abstract : Continuing the similar study of dialkylsulfides (DAS) containing the alkyls C₁-C₄ with straight chains, bromides, picrates and perchlorates of dialkyl-n-bromophenacylsulfonia (I) from 17 DAS-s were obtained; they contain one or two C₃-C₄ alkyls with forked chains (with the exception of tertiary butyl); their melting points, by which it is recommended to identify the corresponding DAS-s, were de-

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CZECHOSLOVAKIA / Analytical Chemistry. Analysis of
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Organic Substances.

Abs Jour : Ref Zhur - Khim., No 10, 1958, No 32220

terminated (melting points of perchlorates - from 69 to 170°, those of picrates - from 80 to 150°). I is produced by the interaction of the DAS with n-bromophenacylbromide, which takes from 20 min. to 8 hours time; a DAS with forked chains reacts more slowly than a DAS with straight chains. The picrates and perchlorates of higher DAS homologues are produced from bromides without separating the latter from the reaction mixture. It is recommended for a more complete identification of the DAS-s to use the x-ray pictures of powdered I perchlorates and the eutectic temperatures of their mixtures with some standard preparations. The melting points of bromides, perchlorates and picrates of I, as well as x-ray picture characteristics and eutectic temperatures of I perchlorates obtained from the above mentioned DAS-s are presented. See report XV in RZhKhim, 1958, 32229.

Card 2/2

CZECHOSLOVAKIA/Analytical Chemistry. Analysis of Organic Substances.

E-3

Abs Jour: Ref Zhur-Khim., No 13, 1958, 43086.

tube, whereby all the organic P is converted to Mg_3P_2 ; in the decomposition flask, filled with N_2 or CO_2 , the phosphide is decomposed, first with water, then with dilute H_2SO_4 , and finally by heating to boiling, to drive off (in a current of N_2 or CO_2) the PH_3 , which is absorbed in Dr-water, where it is converted to H_3PO_4 . The absorbent solution is boiled to remove Dr, cooled, transferred to a separatory funnel into which are added 2 ml 1 N H_2SO_4 and 5 ml of a solution of NH_4 -molybdate (5% solution + 10 N H_2SO_4 1:1). The phosphomolybdic acid thus formed is extracted with 50 ml $CH_3COOC_2H_5$ (the siliconomolybdic acid formed in the reaction of Mg with glass, remains in the aqueous layer), the yellow extract is diluted

Card : 2/3

CZECHOSLOVAKIA/Analytical Chemistry. Analysis of Organic
Substances.

L-3

Abs Jour : Ref Zhur - Khimiya, No 2, 1959, No 4393

Authors : Vacera, M.; Gasparic, J.; Jurecek, M.

Inst : Not given

Title : The Identification of Organic Compounds. XX. Addition Pro-
ducts of Hg(II) With Alkylbenzylsulfides.

Orig Pub : Chem Listy, 52, No 1, 144-146(1958)

Abstract : The addition products (AP) of $HgCl_2$ with methyl, ethyl, n-propyl, iso-propyl, and n-butylbenzylsulfide and with dibenzylmethyphenyl and n-propylphenyleulfide have been prepared by a previously described method (rZhKhim, 1957, 15900) and their properties and constitution have been determined. The properties of the AP of the alkylbenzylsulfides are similar to the properties of the aliphatic sulfide derivatives described in an earlier report. On crystallization from alcohol the Hg

Card 1/2

41

Czech/8-52-11-7/30

AUTHORS: Jureček, L. and Obruba, K.

TITLE: Identification and Determination of U- and N-Benzoic Groups (Identified a Starch of Skopin benzaldehyde, na Kyliku a na dusiku).

PERIODICAL: Českého Litvý, 1956, Vol. 52, Nr. 11, pp. 2066 - 2072

ABSTRACT: Semi-micro and micro-methods for the identification and determination of U- and N-benzoic groups are described. They depend on the degradation of the benzoic group by hydrolysis to form benzaldehyde, which is steam distilled in a stream of inert gas, into an excess of standard nitrophenylhydrazine solution, from which the nitrophenylhydrazone of benzaldehyde separates out. The excess of reagent was determined titrimetrically. The derivative is recrystallized and the melting point determined. Recrystallization, the determination of the benzoic group:



has special significance for the analysis of benzal derivatives of polyhydrolic alcohols and sugars; the determination of the β -benzoic group $-\text{CH}_2\text{C}_6\text{H}_5$ is suitable for the analysis of the benzoic derivatives of nitrogenous bases. Reports in the literature of related methods are very sparse. Haas and Hill (Ref. 1) report the determination of benzoic groups in tribenzalantol gravimetrically as the 2, 4-dinitrophenylhydrazones. Votocak and Valenčík (Ref. 2) described a general method (macro-scale) for the determination of benzoic groups in saccharides in which benzaldehyde (distilled in a stream of CO_2) was determined gravimetrically as the phenylhydrazones. No general method for the determination of benzoic groups in nitrogenous compounds has so far been reported.

The principal or the volumetric method of Schöniger (Ref. 3) was used for the final determination of benzaldehyde. Reagents used: Substances tested: benzaldehyde, benzyl-alcohol, benzyl-alanilate, benzyl-β-alanide, dibenzyl-dicarboxylic acid, dibenzyl-p-phenoxydiamine, dibenzylbenzidine, 2, 4-dinitrophenylhydrazones of benzaldehyde and the semi-carbazones of benzaldehyde. All these derivatives were prepared from commercial starting materials, purified where necessary and from freshly distilled benzaldehyde (distilled in CO_2) stream by the usual methods. They were crystallized to constant melting point and the purity of the majority confirmed by analysis.

Reagents. 0.01 M 2, 4-dinitrophenylhydrazine Solution: The base of triethyl-C₆H₅N₂O₂ was dissolved in 25°C (250 ml) and filtered. The solution is stable for about a week. 0.02 M 4-nitrophenylhydrazine Solution: The base of 4-nitrophenylhydrazine (0.16 g) was dissolved in 25°C (250 ml) and filtered. The solution loses 2-3 drops 0.05 M titanium (III) chloride (125 ml, 10% HCl) was heated to boiling so as to remove dissolved air, 25% HgCl_2 (70 ml) was added and the mixture diluted to 250 ml with boiled water. The reagent is preserved under an inert gas. 0.25 M iron alum: $\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$ (60 g) was dissolved in boiled water and the solution diluted (≈ 1000 ml) with 12-16 mg P-nitroaniline were dissolved in 25°C (200 ml); a mixture of HCl and H_2O_2 (2 ml.) was added and after 5 min., while CO_2 was being bubbled through, the mixture was boiled for 20 min with constant CO_2 bubbling. After cooling, rhodanide solution (2 ml) was added and the excess HgCl_2 solution titrated with Oris iron alum solution, in a stream of CO_2 , to the first rose coloration, which lasted at least 2 min (4 ml. required). A second titration was carried out in the same manner but without the P-nitroaniline addition (8 ml. required).

1 ml. $0.1\text{N} - \text{NH}_4\text{Fe}(\text{SO}_4)_2 \times 2.362 \text{ M}$ P-nitroaniline

Cards/12

Identifications and Determination of UO_2 and U_3O_8

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introduced was a ground glass joint which is joined by a rubber tube with a G3 at the end of the connector. A micro-filtration filter unit of the Filtration unit. A sintered glass filter was used for the filtration of the hydrocarbons. The filter was placed directly in the wide-necked flask where it was fitted with a rubber bung, providing a direct connection to the flask. The filter unit is designed to be used as the filter unit of an automatic distillation apparatus.

Carrey,² vided with a filtration flask (A) or the titration flask for apparatus for titration. The apparatus for titration is made up of a storage flask for aliquots of reagent under pressure (5 ml. capacity) with a micro-burette (10 ml. capacity) fitted with a stopcock and a glass tube leading to the titration flask (A).

ANALYTICAL DETERMINATION OF MATERIALS WITH 4-NITROBENZYL HYDRAZINE.
A 100 mg. sample of material with 4-nitrobenzyl hydrazine used for 20-25 min. in conjunction with 4-nitrobenzyl hydrazine (20-25 mg.) was used in combustion for the 4-nitrobenzyl hydrazine determination. So, so much material were weighed with a long-handled spoon and then transferred to the dry combustion vessel.

reaction vessel contains of parcellate air and the remaining glass is evacuated. Two cottons are attached for holding the flask and the spout is inserted in a diethylene glycol bath. The flask is immersed in a bath containing CO₂. Source is coupled via a Teflon tube to the bath. A stream of CO₂ used to sweep air from the system and to circulate streams of

apparatus. After 5 min's stirring the condenser was closed and water is set in motion through the condensing funnel. 65% H₂O₂ (5 ml.) is added from the bath temperature raised to 150-160°C. The reaction mixture is kept boiling for 10-15 min. The 0.01 N NaOH solution is added dropwise until the reaction mixture becomes neutral.

In this titration, 0.02 N hydrochloric acid was added and the introduction of solution (10 ml.) or 0.02 N sodium hydroxide (10 ml.) was stopped when the pH had been titrated into an absorption surface of the solution indicated. On completion of hydrolysis the bath is heated and the condenser is washed by distillation. On cooling the solution and water (2 ml.) are added until bubbles disappear and the solution is titrated.

equated with the flask with boiled water (carbonate free) and turned through CO_2 (carboyl desiccator carbonate free) at the same time the tube connected. At the same time the introduction started up and maintained the rate of streams of CO_2 in increased temperature of the bath is increased 1-2 bubbles/sec. The temperature of the bath is increased to just boiling and water (6 ml. in all) is added dropwise to just boiling and water (6 ml. in all) is added dropwise

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CIA-RDP86-00513R000619720002-4

CZECH/8-52-11-7/30

Identification and Determination of O- and N-Benzoic Groups
 from the funnel (4 x 2 ml.). After each addition, the same
 volume is distilled over, increase the rate of flow of
 CO_2 during the addition, if necessary. If α -nitrophenyl-
 hydrazine is used, the absorption vessel must be cooled with
 ice, whereas with 2,4-dinitrophenylhydrazine laboratory
 temperature is sufficient. The introduction tube is finally
 disconnected from the condenser and the absorption vessel
 is cleaned with the 2,4-dinitrophenylhydrazine precipitate left
 to stand for 1 hour with 4-nitrophenylhydrazine (6-8 hours
 are necessary (preferably overnight)).

Filtration: Excess nitrophenylhydrazine solution is
 separated from the hydrazine precipitate by vacuum filtration
 with the filtration unit described (A). Absorption vessel
 and filtration tube are washed with 2*n*-HCl (5 or 6x) and
 are carefully drained. In the semi-micro method with
 2,4-diphenylhydrazine 30 ml. of acid are used; for washing
 the 4-nitrophenylhydrazine 20 ml. of acid are used, while
 the micro method for 2-4 dinitrophenylhydrazine used 15 ml.
 of acid.

Filtration: To the nitrophenylhydrazine solution in the
 filtration flask (arrangement B) a mixture of HCl and H_2O_2
 and, after 5 min of bubbling, a gentle stream of CO_2 ,
 which solution (4 ml.) is added. The mixture is boiled
 with constant CO_2 supply and the titration, carried out
 in a CO_2 stream with mixing after complete cooling and
 after the addition of rhodanide solution (2 ml.) with an
 0.1M iron alum solution until a rose colour is obtained and
 lasts at least 2 min (4 ml. required). By the same method
 the amount of 0.1M ferric salt solution required for the
 10 ml. of nitrophenylhydrazine solution is obtained (6 ml.).

Calculation: 1 ml. 0.1M - $\text{M}_2\text{P}_2(\text{SO}_4)_2 = 0.751 \text{ mg C}_6\text{H}_5\text{CH}$

O_2NCH_2 when 4-nitrophenylhydrazine (P_1) and $\text{I} = 1.50 \text{ mg}$

$\text{C}_6\text{H}_5\text{CH}_2$ when 2,4-dinitrophenylhydrazine (P_2),

$$(C - D) \cdot z \cdot \frac{P_1}{P_2} \cdot 100$$

amount weighed (in mg)

Identification of Semialdehyde: The hydrazones, filtered
 off, are recrystallized and the MP obtained.
Results and Discussion: The ease or difficulty of de-
 gradation of the benzyl group depends upon the number of
 benzoic groups in the molecule of the substance.
 Quantitative hydrolysis was always brought about with 60%
 K_2SO_4 for 1 hour. It is very important to filter the sample
 finely. The results from the semi-micro method show that the
 2,4-dinitrophenylhydrazine on the whole gives results
 nearer to the theoretical than the 4-nitrophenylhydrazine,
 above all the 2,4-dinitrophenylhydrazine gives an insoluble
 hydrazine with semialdehyde which enables a thorough
 separation of the precipitate from the remaining reagent.
 Tribenzylaminotol gave higher than theoretical results
 because of mannitol breakdown to give small molecular
 weight carbonyl compounds (six by paper chromatography) which
 give precipitates with 2,4-dinitrophenylhydrazine. There are
 1 figure, 2 tables and 7 references, 2 of which
 are Czech, 1 German and 4 American.

ASSOCIATION: Mafra analytische chemie, Vysoké Škola chemicko-
 technologická, Pardubice, Faculty of
 Department of Analytical Chemistry, Faculty of
 Chemical Technology, Technical University, Pardubice)

SUMMITED:

Card 12/12

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619720002-4"

COUNTRY	: Czechoslovakia
CATEGORY	: Analytical Chemistry--Analysis of organic substances
ABS. JOUR.	: RZKhim., No. 22 1959, No. 78382
AUTHOR	: Gasparic, J., Vecera, M., and Jurecek, M.
INFL.	: Not given
TITLE	: The Identification of Organic Compounds. XXVII. The Application of Friedel-Crafts Acylation in the Identification of Alkylarylsulfides
ORIG. PUB.	: Chem Listy, 52, No 9, 1720-1725 (1958); Collection Czechoslov Chem Commun, 24, No 6, 1899-*.
ABSTRACT	: A new method is proposed for the identification of alkylarylsulfides (AAS), based on their acylation by the Friedel-Crafts method, conversion of the alkylmercaptoacetophenones (AMAP) obtained to the corresponding 2,4-dinitrophenylhydrazones (DNPH), oximes, or alkylsulfonylacetophenones (ASAP), and identification of the latter by their mp's. The acylation of the AAS was carried out by a modification of the method of Cutler (R. A. Cutler et al, J Amer Chem Soc, 74, 5475 (1952))

CARD: 1/5 78382

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COUNTRY	: Czechoslovakia
CATEGORY	
ABS. JOUR.	: RZKhim., No. 22 1959, No. 78382
AUTHOR	:
INFL.	:
TITLE	:
ORIG. PUB.	:
ABSTRACT	: by the gradual addition of 0.5 ml CH_3COCl and of a solution of 0.5 ml AAS in 5 ml CHCl_3 , to a cooled mixture of 0.8 gm anhydrous AlCl_3 , and 5 ml CHCl_3 ; the reaction mixture is allowed to stand for 1 hr at room temperature under moisture-free conditions, after which it is poured over a mixture of ice and 5 ml conc HCl; the lower layer is separated, washed with 5% HCl and a 5% solution of NaHCO_3 , filtered, the CHCl_3 is distilled off, and the AMAP residue is dissolved and converted to the respective derivative. The DNPH are prepared

CARD: 2/5

CATEGORY :

ABS. JOUR. : RZhKhim., No. 1959, No. 86282

AUTHOR : Vecera, M.; Gasparic, J.; Jurecek, M.

INST. :

TITLE : Identification of Organic Compounds. XX.
Addition Products of Mercury (2+) Chloride
and Alkylbenzylsulfides.

ORIG. PUB. : Collect. Czechosl. Chem. Comms, 1959, 24,
No 2, 640-642

ABSTRACT : See RZhKhim, 1959, No 2, 4393

CARD:

120

COUNTRY : GDR
CATEGORY :
H-25

ABS. JOUR. : RZKhim., No. 21 1959, No. 76353

AUTHOR : Juracek, M. and Kozak, P.
SICN. : Not given

TITLE : The Characterization of Carboxylic Acids Used in
the Fats- and Soap-Producing Industry by Oxidation
with Chromic Acid

ORIG. PUB. : Z analyt Chem, 167, No 1, 32-38 (1959)

ABSTRACT : The method which permits a distinction between
fatty (FA), naphthenic (NA), and resin (RA) acids
is based on the oxidation of the above acids with
a mixture of CrO₃ and H₂SO₄, according to the
method of Kun and Rotash [Kuhn and Rotash?] fol-
lowed by alkalimetric titration of the steam-dis-
tilled acid. The results are expressed in mg KOH
required for the titration of the acid formed by
the oxidation of 1 gm of test substance (Kun-
Rotash number (KRN)). A comparison of the KRN

CARD: 1/3

VECERA, M.; VOLAKOVA, B.; KOZAKOVA, M.; JURECEK, M.

Identification of organic substances. Part 32: Identification and separation of aliphatic primary amines as N-alkyl-3,5-dinitrobenzamide. Coll Cz Chem 25 no.5:1281-1286 My '60.

1. Forschungsinstitut fur organische Synthesen, Pardubice-Rybitvi und Institut fur analytische Chemie, Technische Hochschule fur Chemie, Pardubice.

JENIK, J.; JURECEK, M.; PATEK, V.

The elimination of organic substances by means of magnesium.
Part 8: Elementary carbohydrate as a source of defectiveness in
determination of halogens in organic substances by means of
elimination by metals. Coll Cs Chem 25 no.5:1450-1457 My '60.

1. Institut fur analytische Chemie, Technische Hochschule fur
Chemie, Prag.

JURECEK, M.; HUBIK, M.; VECERA, M.

Identification of organic compounds. Part 34: Identification of aliphatic ether. Coll Cs Chem 1458-1467 My '60.

1. Institut fur analytische Chemie, Technische Hochschule fur Chemie, Pardubice und Forschungsinstitut fur organische Synthesen, Pardubice-Rybitvi.

GASPARIC, J.; NOVOTNA, M.; JURECEK, M.

Identification of organic compounds. XXXVIII. Identification of primary aromatic amines after the conversion in aryl azo- - naphtholes. Coll Cz Chem 25 no.11:2757-2764 N '60. (EEAI 10:6)

1. Forschungsinstitut fur organische Synthesen, Pardubice-Rybitvi, Institut fur analytische Chemie, Technische Hochschule fur Chemie, Pardubice (for Gasparic and Jurecek). 2. Derzeitige Adresse:

Vychodoceske Chemicke zavody, Synthesia, Pardubice-Semtin

(Organic compounds) (Aromatic compounds)

(Amines) (Aryl groups) (Azo compounds)

(Naphthol)

JENIK, J.; JURECEK, M.

Elimination of organic substances by magnesium. Part 9: Determining
silica in organic substances. Coll Cz Chem 26 no.4:967-973 Ap '61.

1. Institut fur analytische Chemie, Technische Hochschule fur Chemie,
Pardubice.

(Magnesium) (Silica)

VOLAKOVA, Blanka; KOZAK, Pavel; NOVAK, Vlastimil; BEHAREK, Vojtech;
JURECEK, Miroslav

Analytic aspects of the oxidation of organic nitrogenous
substances by chromic acid. Pt. 5. Sbor VSChf Pardubice
no.1:75-88 '63.

1. Chair of Analytical Chemistry, Higher School of Chemical
Technology, Pardubice.

JUREČEK, M.

CZECHOSLOVAKIA

NEPRAS, M; VECERA, M; BORECKY, J; JUREČEK, M.

1. Research Institute of Organic Synthesis (Forschungsinstitut
für organische Synthesen), Pardubice-Rybitví; 2. Technical
Higher School of Chemistry (Technische Hochschule für
Chemie), Pardubice

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1963, pp 2706-2714

"Identification of Organic Compounds. L. Identification
of Mono- and Dichloranthrachinones."

(4)

JURECEK, M.

CZECHOSLOVAKIA

NOVAK, V; KOZAK, P; VACULOVÁ, D; JURECEK, M.

Technical Higher School of Chemistry (Technische Hochschule für Chemie), Pardubice (for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 12, 1963, pp 3443-3446

"Analytical Aspects of Oxydation of Organic Nitrogen
Compounds with Chromic Acid. III. Oxydation of
Aromatic Amine and Determination of Amino Nitrogen."

(4)

NOVAK, V.; KOZAK, P.; MATOUSEK, P.; JURECEK, M.

The analytic aspects of the oxidation of organic nitrogen compounds with the chromic acid. Pt.1. Coll Cz Chem 28 no.2:487-493 F '63.

1. Institut fur analytische Chemie, Technische Hochschule fur Chemie, Pardubice.

NEPRAS, M.; VECERA, M.; BORECKY, J.; JURECEK, M.

Identification of organic compound. Pt.50. Coll. Cz Chem
28 no.10:2706-2715 0 '63.

1. Forschungsinstitut fur organische Synthesen, Pardubice-
Rybitvi und Technische Hochschule fur Chemie, Pardubice.

L 1709-66 EWT(m)/EFP(c)/EFP(t)/EFP(b) IJP(c) JD
ACCESSION NR:AP5024159

CZ/003/64/000/02/0900/0912

AUTHOR: Majer, P. (Mayer, P.) (Docent, Candidate of sciences) (Bratislava);
Jurecek, M. (Yurechek, M.) (Professor, Doctor, Engineer) (Praha)

TITLE: Determination of active hydrogen in some nitro and nitroso compounds

SOURCE: Chemické zvesti, no. 12, 1964, 900-912

TOPIC TAGS: hydrogen, gas analysis, gas analyzer, chemical kinetics, organic
nitro compound, organic nitroso compound

ABSTRACT: Analytical methods using liberated gas measurement
in a gas meter were investigated; as hydrogen source LiAlH₄
dissolved in N-ethylmorpholine and dibutylether was used.
Kinetic study of the course of reaction showed that with
some of the materials investigated it was possible to distin-
guish the reaction of the active hydrogen from the reaction
of the nitro and nitroso groups with the reagent, and that
therefore it is possible to determine active hydrogen in the
presence of these groups. Orig. art. has: 14 graphs, 2 tables.

Card 1/2

L 1709-66

ACCESSION NR: AP5024159

2

ASSOCIATION: Katedra analytickyj chemie Prirodovedeckoj fakulty University
Komenskeho, Bratislava (Department of Analytical Chemistry, Faculty of Natural
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technologickej, Pardubice (Department of Analytical Chemistry College of Technical
Chemistry)

SUBMITTED: 15Feb63

ENCL: 00

SUB CODE: OC, CC

NR REF Sov: 000

OTHER: 035

JPS

Card 2/2 AP

JURECEK, Z.

The third population census in Czechoslovakia, Statist. zpravod.
13 no.2:41-45 15 F '50. (CML 19:2)